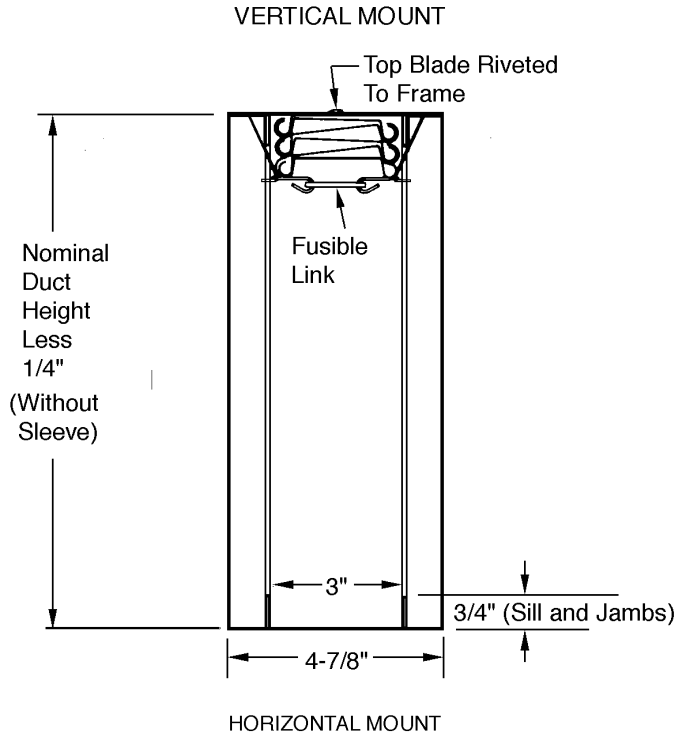


**FIRE/SEAL® UL-CLASSIFIED
1-1/2 HR. STATIC RATED
FIRE DAMPER**

**MODEL 117A
VERTICAL & HORIZONTAL**

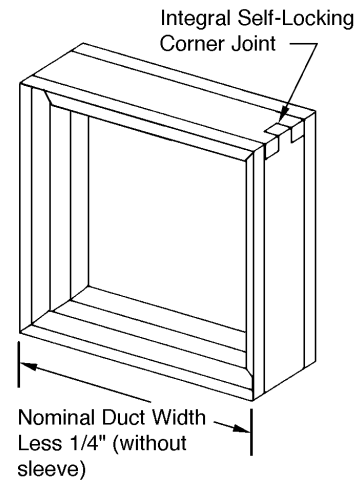
Classified by Underwriters Laboratories as a 1-1/2 hour fire protection rated Fire Damper, in accordance with Standards UL-555 and NFPA-90A, for the protection of openings in fire partitions having a fire resistance rating of less than 3 hours.



UNDERWRITERS LABORATORIES, INC.
CLASSIFIED
FIRE DAMPERS
FIRE RESISTANCE RATING 1-1/2 HR.
SEE U.L. CLASSIFIED BUILDING MATERIALS INDEX

Arrow United Industries

**California State Fire Marshal
Listing No. A3225-206:104**



(*) Damper to be installed with blade lock points facing DOWNWARD and with access from above.

STANDARD MATERIALS & CONSTRUCTION:

FRAME: One-piece rollformed 22 Ga. galvanized steel.

BLADES: 22 Ga. galvanized steel curtain-type.

FUSIBLE LINK: UL-listed 165°F; replaceable. (Optional 212°F available at no additional charge).

CLOSURE SPRINGS (Horizontal Models): Heat-treated Type 301 stainless steel constant force coiled negator type.

PROJECT:

LOCATION:

ARCHITECT

ENGINEER:

CONTRACTOR:

PO NUMBER:

DATE:

DIMENSIONAL DATA:

MINIMUM SIZE: 4"W X 4"H.

MAXIMUM SIZE - VERTICAL (Model 117AV):

Single Panel: 60"W x 60"H.

Multiple Panel: 120"W x 80"H; in max. panels of 40"W x 40"H.

MAXIMUM SIZE - HORIZONTAL (Model 117AH):

Single Panel: 48"W x 48"H.

Multiple Panel: 97"W x 42"H; in max. panels of 36"W x 42"H.

NOTE: Unassembled multiple units do not include mullions.

*Additional Information
on reverse side*

 Arrow United Industries
A Division of Mestek, Inc.
314 Riverside Drive • Wyalusing, PA 18853
Ph: (570)-746-1888 Fax: (570)-746-9286
www.arrowunited.com

ARROW UNITED INDUSTRIES SUBMITTAL DATA

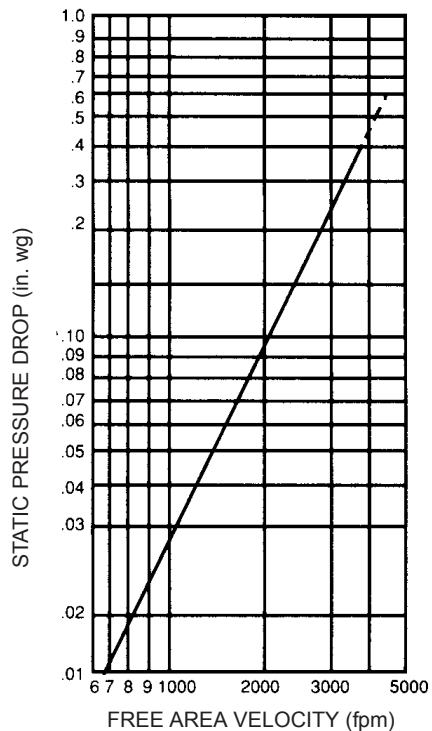
FIRE/SEAL® UL-CLASSIFIED 1-1/2 HR. STATIC RATED FIRE DAMPER

MODEL 117A

FREE AREA (sq. ft.)
Duct Width (in.)

DUCT HEIGHT (in.)	FREE AREA (sq. ft.) Duct Width (in.)															
	4"	8"	12"	16"	20"	24"	28"	32"	36"	40"	44"	48"	52"	56"	60"	
4"	.03	.09	.1	.2	.3	.3	.4	.4	.5	.6	.6	.7	.7	.8	.9	
8"	.1	.2	.4	.6	.7	.9	1.0	1.2	1.4	1.5	1.7	1.8	2.0	2.2	2.3	
12"	.2	.4	.7	.9	1.2	1.5	1.8	2.0	2.3	2.6	2.8	3.1	3.4	3.6	3.9	
16"	.2	.6	.9	1.3	1.7	2.0	2.4	2.8	3.1	3.5	3.9	4.2	4.6	5.0	5.3	
20"	.3	.7	1.2	1.7	2.1	2.6	3.1	3.5	4.0	4.5	5.0	5.4	5.9	6.4	6.8	
24"	.4	.9	1.4	2.0	2.6	3.2	3.7	4.3	4.9	5.4	6.0	6.6	7.1	7.7	8.3	
28"	.4	1.0	1.7	2.4	3.0	3.7	4.4	5.0	5.7	6.4	7.0	7.7	8.4	9.0	9.7	
32"	.5	1.2	2.0	2.7	3.5	4.3	5.1	5.8	6.6	7.4	8.2	9.0	9.7	10.5	11.3	
36"	.5	1.3	2.2	3.1	4.0	4.8	5.7	6.6	7.4	8.4	9.2	10.1	11.0	11.8	12.7	
40"	.6	1.5	2.5	3.5	4.4	5.4	6.4	7.4	8.4	9.3	10.3	11.3	12.3	13.2	14.2	
44"	.6	1.7	2.7	3.8	4.9	6.0	7.0	8.1	9.2	10.3	11.4	12.4	13.5	14.6	15.7	
48"	.7	1.8	3.0	4.2	5.4	6.6	7.7	8.9	10.1	11.3	12.5	13.7	14.8	16.0	17.2	
52"	.8	2.0	3.3	4.5	5.8	7.1	8.4	9.7	11.0	12.2	13.5	14.8	16.1	17.4	18.7	
56"	.8	2.1	3.5	4.9	6.2	7.6	9.0	10.4	11.7	13.1	14.5	15.9	17.2	18.6	20.1	
60"	.9	2.3	3.8	5.3	6.8	8.2	9.7	11.2	12.7	14.2	15.7	17.2	18.6	20.1	21.6	


$$\text{FREE AREA VELOCITY [FPM]} = \frac{\text{FLOW (cfm)}}{\text{FREE AREA (sq. ft.)}}$$



AVAILABLE OPTIONS:

1. Factory-supplied sleeves (20 Ga. through 10 Ga.).
2. Type 304 stainless steel construction.
3. 212°F fusible link.
4. Electro Thermal Link [ETL®].
5. SPDT "closed damper" position indicator switch.

IN THE INTEREST OF PRODUCT DEVELOPMENT, ARROW UNITED
RESERVES THE RIGHT TO MAKE CHANGES WITHOUT NOTICE.


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